

LINDA LINGLE
GOVERNOR OF HAWAII



CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
SAFE DRINKING WATER BRANCH
919 Ala Moana Boulevard, Room 308
Honolulu, Hawaii 96814

In reply, please refer to:
File: SDWB

January 11, 2010

Mr. Lono Tyson
Director
Department of Environmental Management
25 Aupuni Street
Hilo, Hawai'i 96720

ATTENTION: Mr. Gene Quiamas

Dear Mr. Tyson:

SUBJECT: **KOMOHANA HEIGHTS;**
UNDERGROUND INJECTION CONTROL (UIC) PROGRAM'S REVIEW OF
INJECTION-WELL CESSPOOL BACKFILLING
FINAL COMPLETION REPORT DATED 12/18/2009,
UIC FILE NO. UH-2597

Based on the submitted information, the abandonment work for the **two injection wells** appears completed. Therefore, as of this letter's date, UIC File UH-2597 is closed.

Please be aware that this file closure does not absolve the facility from responsibility should environmental problems arise from the past construction or operation of the injection wells.

If you have any questions regarding this subject, please contact Jaime Rimando of the Safe Drinking Water Branch at 586-4258 (Honolulu) or call direct toll free from Big Island at 974-4000, ext. 64258.

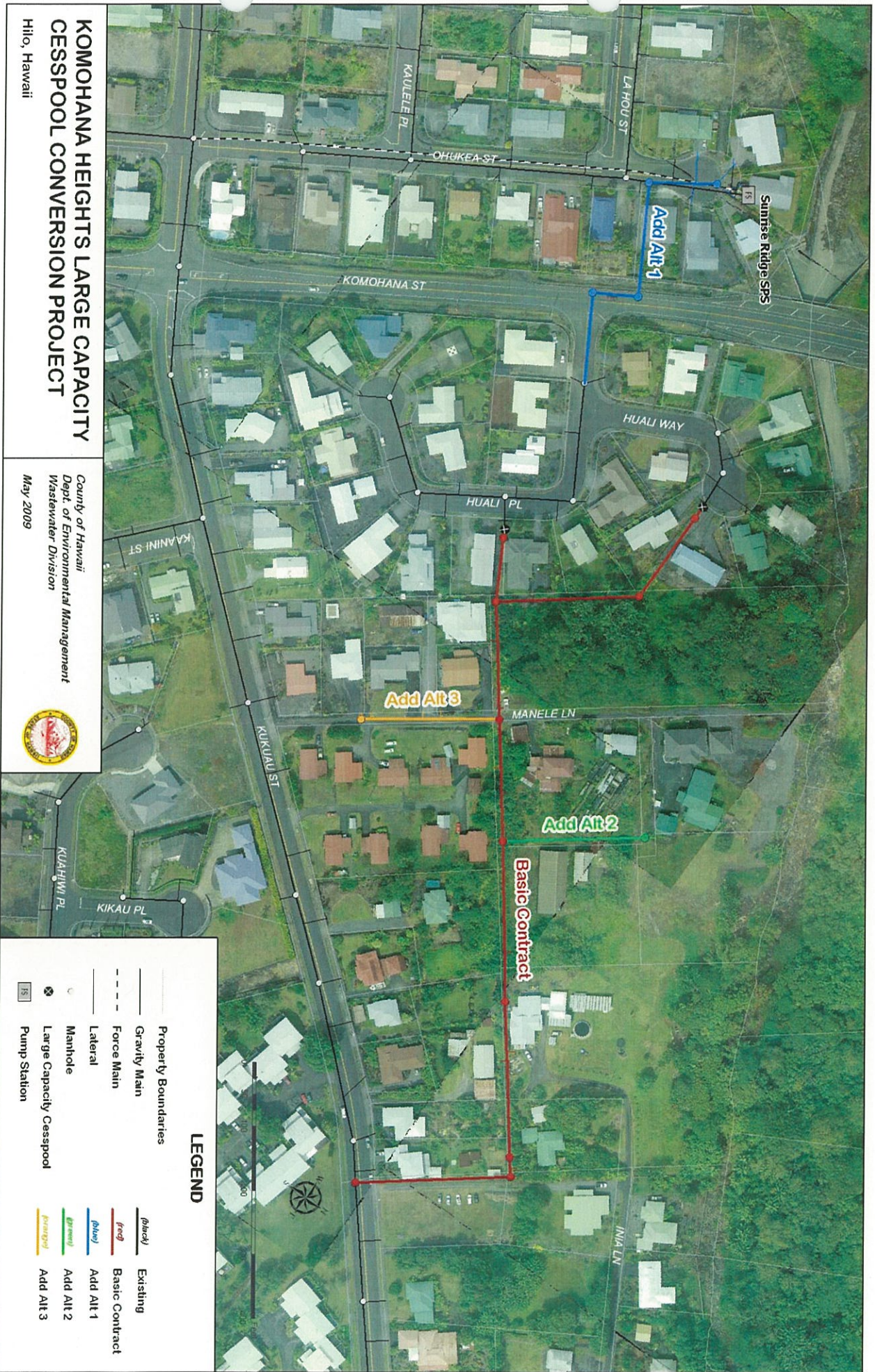
Sincerely,

A handwritten signature in cursive script, likely belonging to Stuart Yamada.

STUART YAMADA, P.E., CHIEF
Safe Drinking Water Branch
Environmental Management Division

JR:nbp

c: Katherine Rao
Ground Water Office (WTR-9)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, Ca 94105



**KOMOHANA HEIGHTS LARGE CAPACITY
CESSPOOL CONVERSION PROJECT**

Hilo, Hawaii

County of Hawaii
Dept. of Environmental Management
Wastewater Division
May 2009



LEGEND

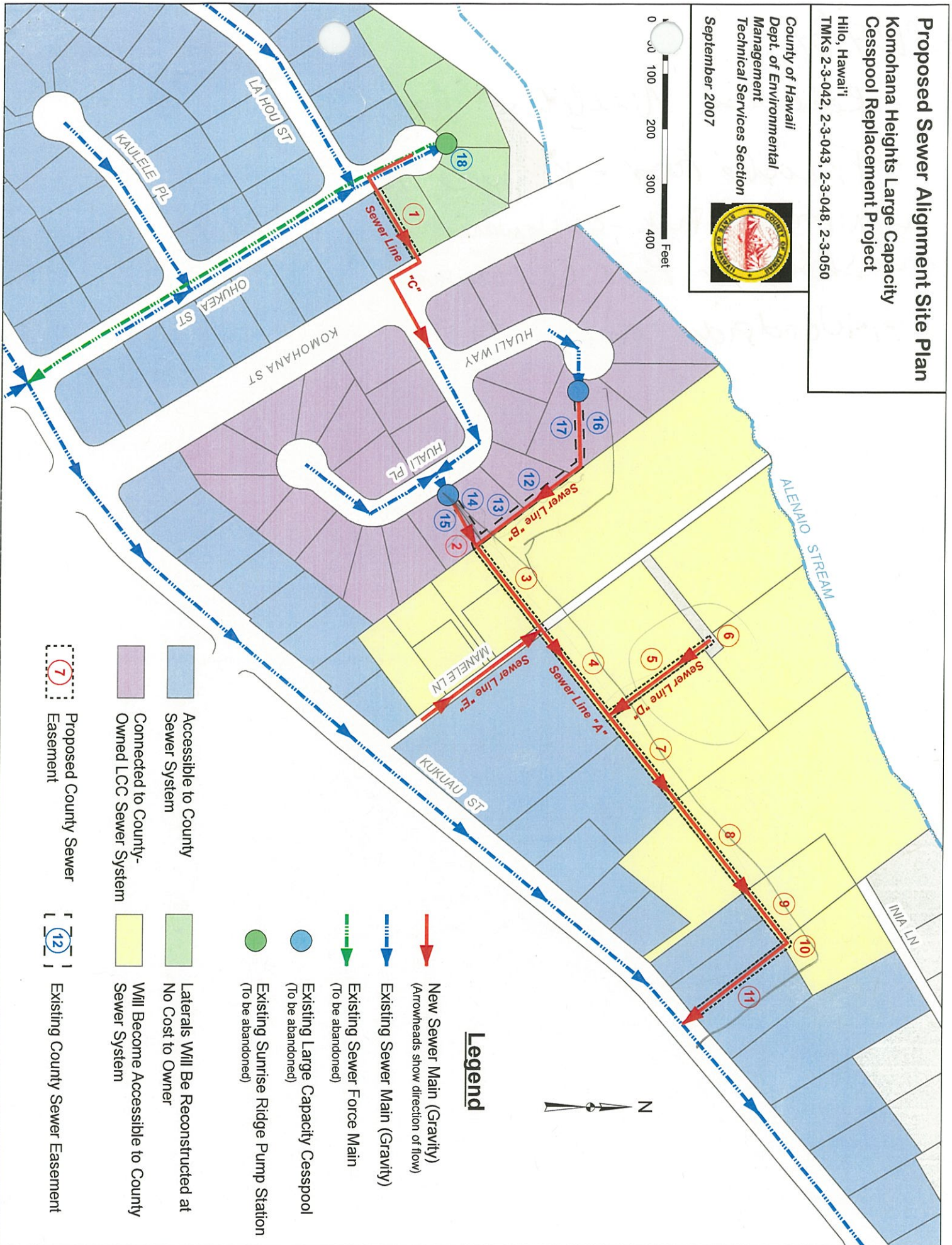
- | | |
|-------------------------|----------------|
| Property Boundaries | Existing |
| Gravity Main | Basic Contract |
| Force Main | Add Alt 1 |
| Lateral | Add Alt 2 |
| Manhole | Add Alt 3 |
| Large Capacity Cesspool | |
| Pump Station | |

Proposed Sewer Alignment Site Plan

Komohana Heights Large Capacity
Cesspool Replacement Project

Hilo, Hawaii
TMKs 2-3-042, 2-3-043, 2-3-048, 2-3-050

County of Hawaii
Dept. of Environmental
Management
Technical Services Section
September 2007



Legend

- New Sewer Main (Gravity)
(Arrowheads show direction of flow)
- Existing Sewer Main (Gravity)
- Existing Sewer Force Main
(To be abandoned)
- Existing Large Capacity Cesspool
(To be abandoned)
- Existing Sunrise Ridge Pump Station
(To be abandoned)
- Accessible to County Sewer System
- Connected to County-Owned LCC Sewer System
- Will Become Accessible to County Sewer System
- Laterals Will Be Reconstructed at No Cost to Owner
- Proposed County Sewer Easement
- Existing County Sewer Easement

December 17, 2009

Komohana Heights Large Capacity Cesspool Replacement
Hilo, Hawai'i, County of Hawai'i
Department of Environmental Management, Wastewater Division
Job No. WW-3719

Subject: **Cesspool Closure Report – State of Hawai'i Department of Health
Safe Drinking Water Branch (SDWB), UIC Permit #UH-2597**

Method of Closure: Cesspool A

December 15, 2009

Cesspool Diameter: ±13' Depth: ±22'6"

1. The cesspool cover was located and a three foot (3') wide section of the cesspool cover was removed to expose the cesspool.
2. Inverts were verified and the existing 8" VCP pipe was connected to the new sewer manhole #8 to bypass the cesspool.
3. B&B Pumping Service was on site to clean, pump and removed the liquids and solids from the cesspool's walls and bottom. Approx. 4' of liquids and solids (3,200 gals.) were disposed at the Hilo Wastewater Treatment Plant.
4. Upon completion of the cleaning and pumping, visual inspection was done. No ground water was evident.

December 16, 2009

1. 100 cubic yards of Controlled Low-Strength Material (CLSM) 500 psi was used to fill the cesspool. The material was not permitted to fall greater than 6'. To achieve this, the contractor inserted an 18" corrugated pipe into the hole and released the concrete into the corrugated pipe.

Method of Closure: Cesspool B

December 16, 2009

Cesspool Diameter: 13' Depth: 23'

1. The cesspool cover was located and a three foot (3') trench was wide section of the cesspool cover was removed to expose the cesspool.
2. Inverts were verified and the existing 8" VCP pipe was connected to the new sewer manhole #10 to bypass the cesspool.
3. B&B Pumping Service was on site to pump the liquids and some solids from the bottom of the cesspool. The Hilo Line Maintenance Section also assisted to remove heavy debris (rags) from the walls and bottom of the cesspool using a Vactor Truck. Approx. 2' of liquids and solids (1,500 gals.) were disposed at the Hilo Wastewater Treatment Plant.
4. Upon completion of the cleaning and pumping, visual inspection was done. No ground water was evident.

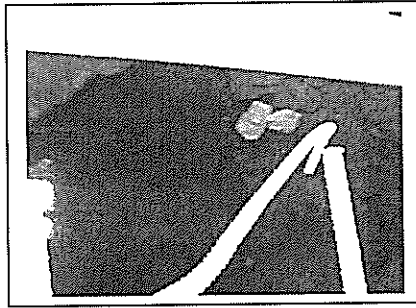
December 17, 2009

1. 100 cu. yards of Controlled Low-Strength Material (CLSM) 500 psi was used to fill the cesspool. The material was not permitted to fall greater than 6'. To achieve this, the contractor inserted an 18" corrugated pipe into the hole and released the concrete into the corrugated pipe.

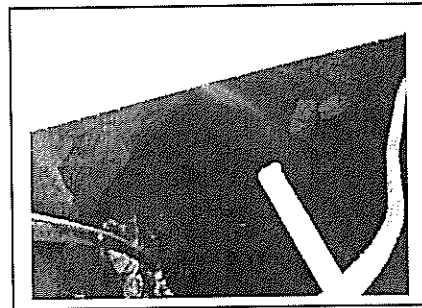
Cesspool A – Komohana Heights LCC Closure – Permit # UH 2597



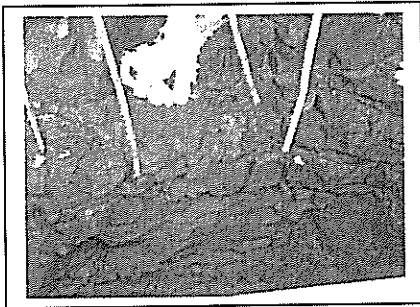
Cesspool A Prior to cleaning



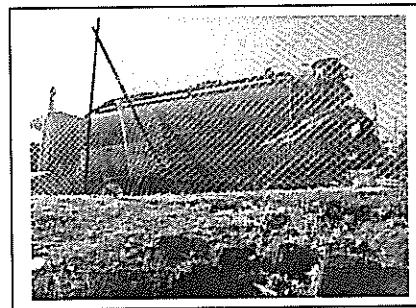
Cesspool A – Prior to Cleaning



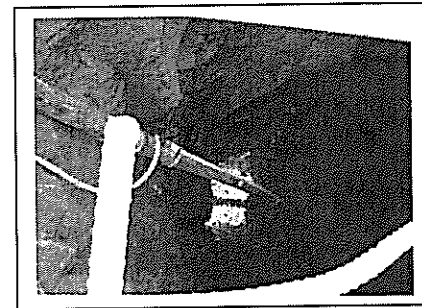
Cesspool A – Cleaning of Side Walls



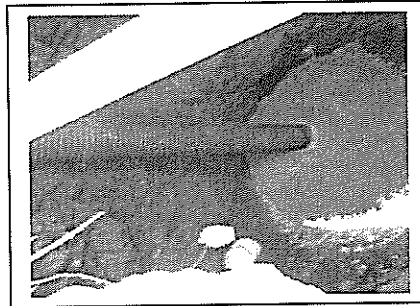
Cesspool A – Side wall view



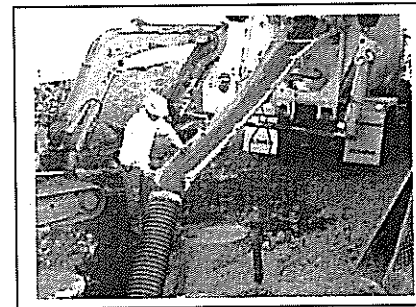
B&B Pumping



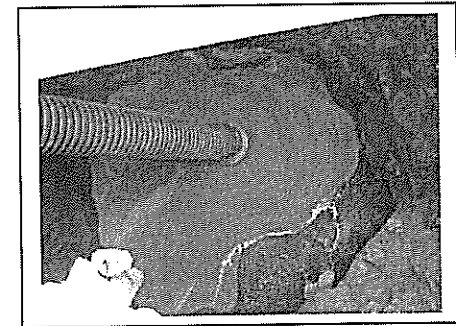
Cesspool A - Pumping of Sludge & Debris



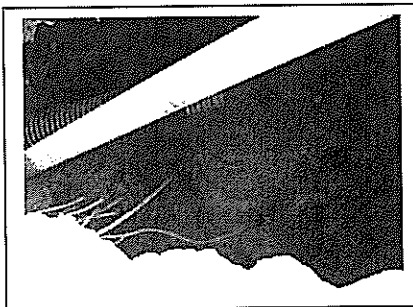
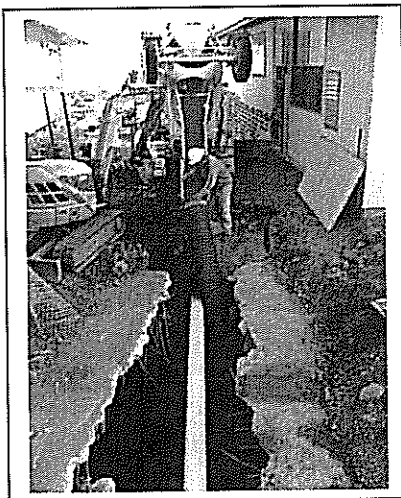
Cesspool A – early stage of backfilling



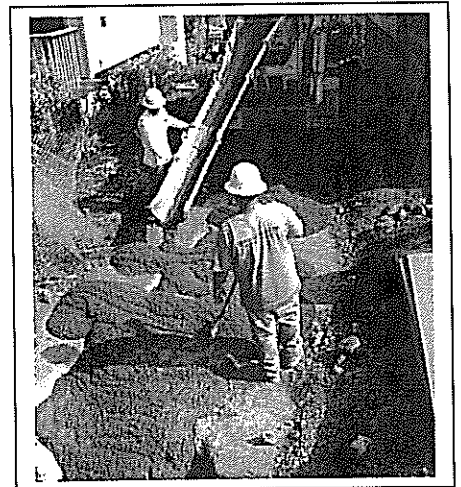
Cesspool A – Method of backfilling Trunk



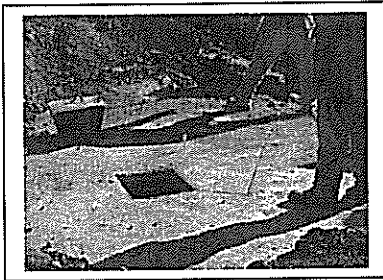
Cesspool A – Trunk



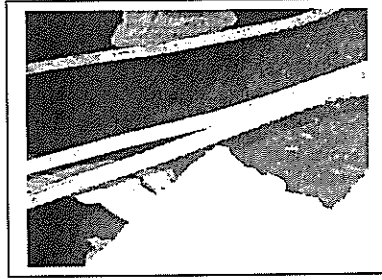
Cesspool A – backfilling in lifts w/CLSM



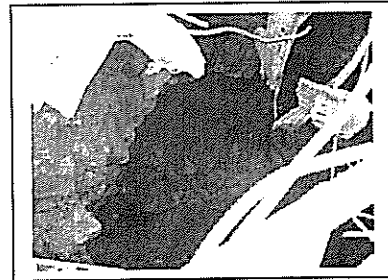
Cesspool B – Komohana Heights LCC Closure – Permit # UH 2597



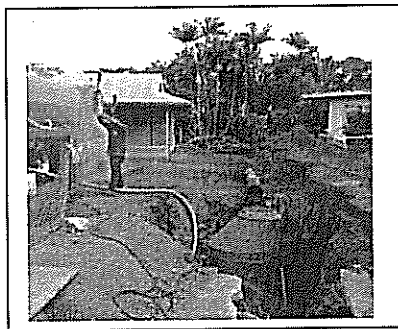
Cesspool B- Cutting of Cover



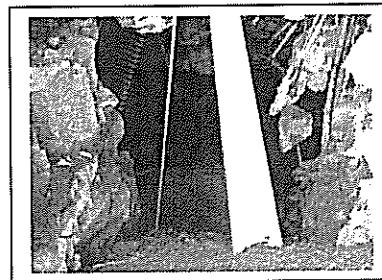
Cesspool B – prior to cleaning



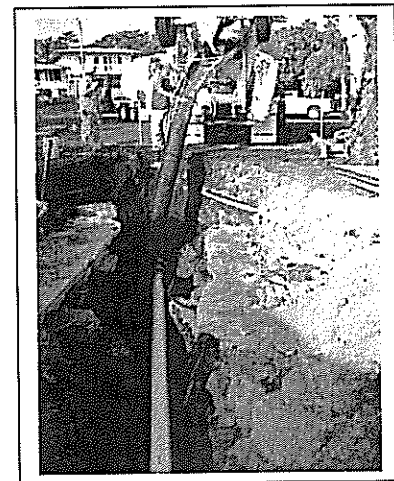
Cesspool B after cleaning



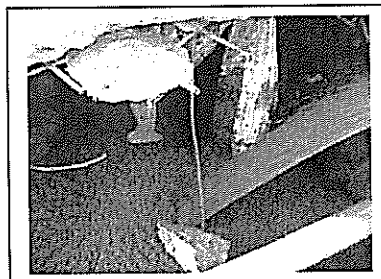
Cleaning of Cesspool – B&B



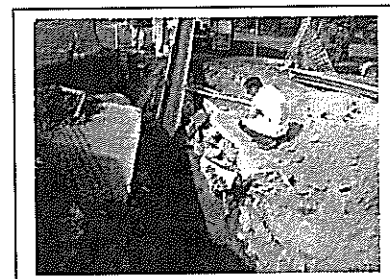
Cesspool B – gradual lifts



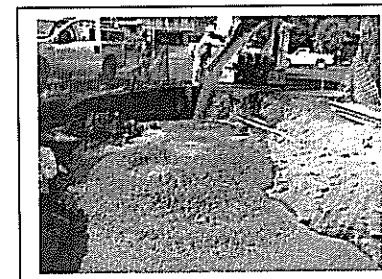
Cesspool B – ½ full



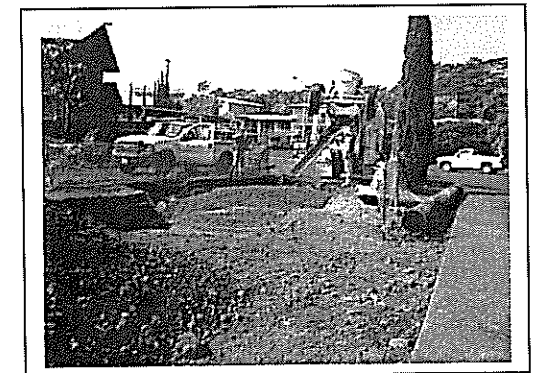
Cesspool B – ¼ full



Cesspool B – Filling to Cover



Cesspool B – Closure Complete



Cesspool B – Final View